



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

C3-3-7
Job Sheet 171611



Part No: C3-3-7

Job Qty: 30 ea

Part Name: Link



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 2/5/18

Job Tracking No:

Due Date: 2/16/18

Created By: Marie Lajeunesse

Type: Stock

Description:

Ship Via: DWG C3-3-7 Rev 4A

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup	Run	Workcenter / Supplier	Lead Time	
90	Start up Operation	30 Ea		2/15/18	0.00	0.00	Start Up Machining-4		B.A 18-03-05
100	Bandsaw	30 pcs		2/15/18	0.08	2.00	Bandsaw1		B.A 18-03-05
120	CNC Vertical Machining	30 pcs		2/16/18	1.00	2.00	MORI NV5000-1		B.A 18-03-05
130	QC	30 pcs		2/16/18	0.00	0.00	QC2 Machining-5		B.A 18-03-05
140	QC	30 pcs		2/16/18	0.00	0.00	QC8 Machining-5		
150	Outsource	30 pcs		2/16/18	0.00	0.00	Outsource1		AT 18/03/16
160	Packaging	30 pcs		2/16/18	0.00	0.00	Packaging2		
170	QC	30 pcs		2/16/18	0.00	0.00	QC6		
180	Outsource	30 pcs		2/16/18	0.00	0.00	Outsource 15 PK		PO039823 CT 18-26-
190	Packaging	30 pcs		2/16/18	0.00	0.00	Packaging2		Chas 18/03/19
200	QC	30 pcs		2/16/18	0.00	0.00	QC6		38
210	Packaging	30 pcs		2/16/18	0.00	0.00	Packaging3-2		9-89
220	QC21-FG	30 Ea		2/16/18	0.00	0.00	QC21		GA-alain

Part Op 100 - CUT BLANK 5.625" LONG ***ONE BLANK MAKES 5 PARTS***

Descriptions: 120 - 1-Machine as per folio FB809 FOLIO REV: _____ DWG REV: _____ 2-Deburr

150 - 1-Issue P/O to Metcore ; P/O 39247 RC 50-55 2-Bead blast 3- Certificate of Conformity is required

NOTE DROP SHIP TO FINISHER Metcore to ship directly to Groupe Altech

160 - Receive

180 - Issue P/O to Groupe Altech: P/O _____ - Nickel plate, QQ-N-290, CLASS 2, GRADE E OR F NICKEL PLATE TO .0004-.0006 - Certificate of Conformity is required

190 - Receive

210 - Identify and stock

MAR 08 2018

DAS
13
9-89

DAS
13
9-89

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
MT-O1-B-0.250X0.378	Tool Steel Bar 0.250"H x 0.378"W	15 (5 ea)	90-Start up Operation	
5043706		2.931 ^{ft} (0.097 ea)		

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	MT-O1-B-0.250X0.378	15	0	0

5048427

Part Specifications

Specifications could not be found.

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, ON K6A 1K7 CANADA TEL.: 1 813 832-8200 Email: sales@dartaero.com www.dartaerospace.com Container No: 8048430 Part: C3-3-7 Job No: 171611 Serial No/Batch: 8048430 Revision: _____ Inspector: _____ Date: 03/06/18				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
				OTHER : _____	
Root Cau Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐		FAULT CATEGORY Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



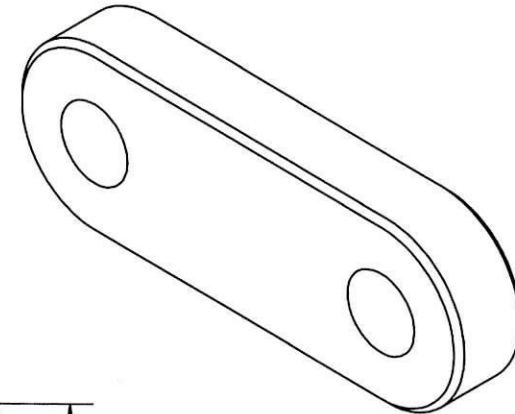
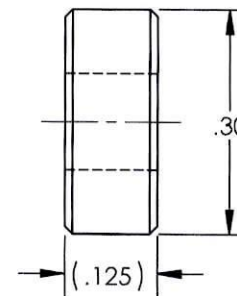
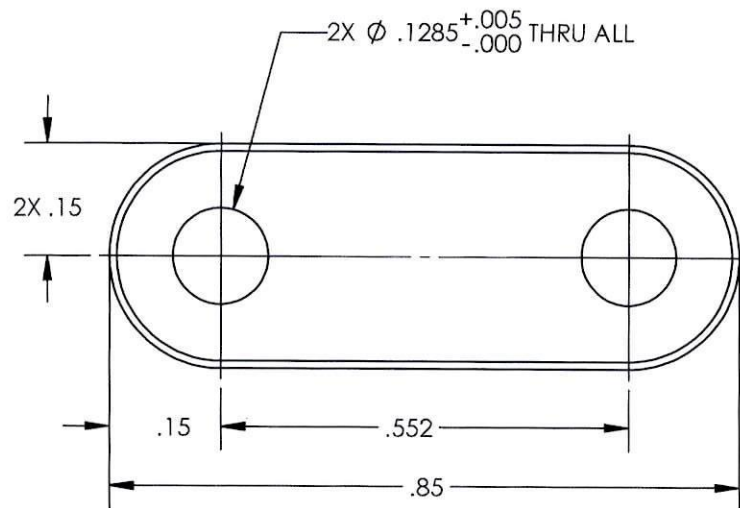
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2		HARNES SPEC. ADDED.	2/7/2004		
3		HOLE SIZE CHANGE.	10/4/05		
4		CHANGED HOLE FROM Ø.136 TO .1285.	8/17/2012	JAG	
4A	14-0111	CH'D TITLE BLOCK WAS RED BARN IS DART. ADDED BAG & LABEL NOTE. CH'D TOLERANCE NON-CRITICAL DIMENSIONS.	8/6/2014	DJN	RW



NOTE:

1. BAG & LABEL WITH BATCH NUMBER.
2. NICKEL PLATE .0004-.0006 BAKE AFTER PLATING.

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 171611 180201

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
			C3-3-7	1	LINK	01	1/8 X 3/8 X 1	

DART AEROSPACE	
TITLE LINK	
DWG NO. C3-3-7	REV 4A
MAT'L 01	DRAWN BY: CANAM
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D. Weid</i>
.XXX ± .005 FRACTIONS ± 1/8	HEAT TREAT RC 50-55
.XX ± .01 ANGLES ± 5°	FINISH SEE NOTE 2
.X ± .1	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 4:1	DATE 11/8/2001 SHEET 1 OF 1

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval 	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	

Root Cause			FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____				
Misidentified ☐	Past Due ☐					



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO039247

Supplier: MEI001-VC
Metcor Inc.
560 Boul. Arthur Sauve
Saint-Eustache
QC
J7R 5A8 Canada
Phone: 450 473 1884
Fax: 450 491 5498

PO No: PO039247

PO Date: 3/8/18

Due Date: 3/19/18

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Baker, Diane
Phone: dbaker@dartaero.com

E-MAILED
MAR 16 2018

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground

Pymt Terms: Net 30

Freight Terms:

Special Comments:

Items

Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1		C45-3-4	Pin 1--Issue P/O to Metcore ; P/O _____ RC 53-56 2-Bead blast 3- Certificate of Conformity is required ***NOTE*** DROP SHIP TO FINISHER Metcore to ship directly to Groupe Altech	Firmed	3/19/18	30 pcs	0 pcs	30 pcs	\$10.00/pcs	\$300.00
Line Item Note part made from O1 round bar										
2	173437	C3-3-7	Link 1--Issue P/O to Metcore ; P/O _____ RC 50-55 2-Bead blast 3- Certificate of Conformity is required ***NOTE*** DROP SHIP TO FINISHER Metcore to ship directly to Groupe Altech	Firmed	3/19/18	20 pcs	0 pcs	20 pcs	\$6.00/pcs	\$120.00
Line Item Note part made from O1 round bar										
	171611			Firmed	3/19/18	30 pcs	30 pcs	30 pcs	\$6.00/pcs	\$180.00
Sub Total:						50	0	50		\$300.00
Grand Total:										\$600.00

Order Notes

CL

Order Notes

Procurement Quality Clauses

A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 3/16/18 8:18 AM dart.lavoie.chantal

METCOR INC.

560 BOUL. ARTHUR-SAUVÉ, ST-EUSTACHE, QC, J7R 5A8

Tél.: 450-473-1884

Télécopieur / Fax administration: 450-491-5498

Télécopieur / Fax production: 450 491-6454

Certificat de Conformité Détail

Detailed Certificate of Compliance

BON DE TRAVAIL order	CHARGEMENT load
326002	1

CLIENT / customer 215

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K6A 1K7

LIVRÉ À / shipped to:

GROUP ALTECH

2455 ALPERN

ST LAURENT

QC H4S1N9

1

COMMANDE DU CLIENT customer po	CLASSIFICATION PIECE part classification	MATÉRIEL material	MAÎTRE D'OEUVRE prime contractor	PROGRAM
39247	N/A	O1		
<u>SPÉCIFICATIONS DU PROCÉDÉ</u> processing specifications				
SEL HARDEN				
HARDEN AND TEMPER				
EXIGENCE / requirement SPÉCIFICATIONS / specified TESTS EXÉCUTÉS / performed RÉSULTATS DE TESTS / results				
HARDNESS		50 - 55 HRC	50	52 - 53 HRC
QUANTITÉ quantity	POIDS weight	DESCRIPTION DES PIÈCES parts description		
50	1	C3-3-7 (20) C3-3-7 JOB. 173437 (30) C3-3-7 JOB. 171611 1 BOITE DE CARTON		

COMMENTAIRES / comments

SALT HARDEN 1475F, 20MIN
TEMPER 700F, 2HRS

Toutes les opérations de TT ont été faites en conformité avec les requis de la spécification demandée et toutes les vérifications et les tests demandés ont été faites et documentés. Aucun changement n'a été fait par rapport au TT. On certifie que le matériel a été fabriqué, échantillonné, testé et inspecté en accord avec les spécifications du matériel et le bon de commande et le matériel rencontre les exigences spécifiées.

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Heat treatment (HT) was performed with equipment that meets the requirements of requested specification. All HT operations were performed in compliance with the required HT specification and all verifications have been performed and documented. No unauthorized changes were performed in regards to the HT. We certify that the material was manufactured, sampled, tested and inspected in accordance with the material specification and the purchase order and was found to meet the requirements.

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Vincent Constat



23 MAR. 2010



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO039423

Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

PO No: PO039423
PO Date: 3/26/18
Due Date: 4/6/18
Purchase Order Revision:
Revision Date:
Ship-To Contact: Tsimiklis, Chrisoula

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pymt Terms: Net 30
Freight Terms:
Special Comments:

Items

Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	173437	C3-3-7	Link 1-Issue P/O to Metcore ; P/O _____ RC 50-55 2-Bead blast 3- Certificate of Conformity is required ***NOTE*** DROP SHIP TO FINISHER Metcore to ship directly to Groupe Altech Issue P/O to Groupe Altech: P/O _____ - Nickel plate, QQ-N-290, CLASS 2, GRADE E OR F NICKEL PLATE TO .0004-.0006 - Certificate of Conformity is required	Firmed	4/6/18	20 pcs	0 pcs	20 pcs	\$4.80/pcs	\$96.00
2	171611	C3-3-7	Link 1-Issue P/O to Metcore ; P/O _____ RC 50-55 2-Bead blast 3- Certificate of Conformity is required ***NOTE*** DROP SHIP TO FINISHER Metcore to ship directly to Groupe Altech Issue P/O to Groupe Altech: P/O _____ - Nickel plate, QQ-N-290, CLASS 2, GRADE E OR F NICKEL PLATE TO .0004-.0006 - Certificate of Conformity is required	Firmed	4/6/18	30 pcs	0 pcs	30 pcs	\$4.80/pcs	\$144.00

x30



Certificat de Conformité / Certificate of Compliance

(007933-1)

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupaltech.com

Bon de Livraison / Packing Slip

007933 - 1

Livré à / Ship to

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 BUYER:

Date expédition Ship date		Créé Par Generated By	Transport / No de Compte Courier / Acc. No.	Bon de commande Client Customer Purchase Order No.				
29-Mar-2018		Aman		039423				
#Ligne Line#	No. de Série / # Pièce Part Number / Line Item Details Job # / Ref #	Description pièce(s)	CATG. U/M	Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir/ Back Order
1	C3-3-7 Rev.	C3-3-7 SAND BLAST ALL OVER NICKEL PLATE QQ-N-290 CLASS 2 GRADE E OR F 0.0004-0.0006	E-NICKEL STEEL CH	20	20	0	0	0
2	C3-3-7 Rev.	C3-3-7 SAND BLAST ALL OVER NICKEL PLATE QQ-N-290 CLASS 2 GRADE E OR F 0.0004-0.0006	E-NICKEL STEEL CH	30	30	0	0	0

Notes Additionnelles / Additional Notes

1 parcel

Epaisseur réelle
Actual Thickness

Inspecteur Qualité
Quality Inspector

Réçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
 Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
 Our financial and legal responsibility will not be higher than the amount of invoice.